

Murfreesboro Fire Department 2009 Annual Report



Murfreesboro "Creating a Better Quality of Life"



... creating a better quality of life

MEMORANDUM

DATE: February 16, 2010

TO: Mayor Tommy Bragg
Members of the City Council
City Manager Rob Lyons

FROM: Fire Chief Cumbey Gaines

SUBJ: 2009 ANNUAL REPORT

I am pleased to present the 2009 Annual Report for the Murfreesboro Fire Department. This report summarizes activities of the Fire Department from January 1, 2009 through December 31, 2009.

I am proud of the men and women that make up this department. Our department and its members continue to be recognized statewide as leaders of today's progressive fire service. Other departments, both local and across the state, frequently develop programs for their citizens based on the innovative ideas already implemented by the men and women of the Murfreesboro Fire Department.

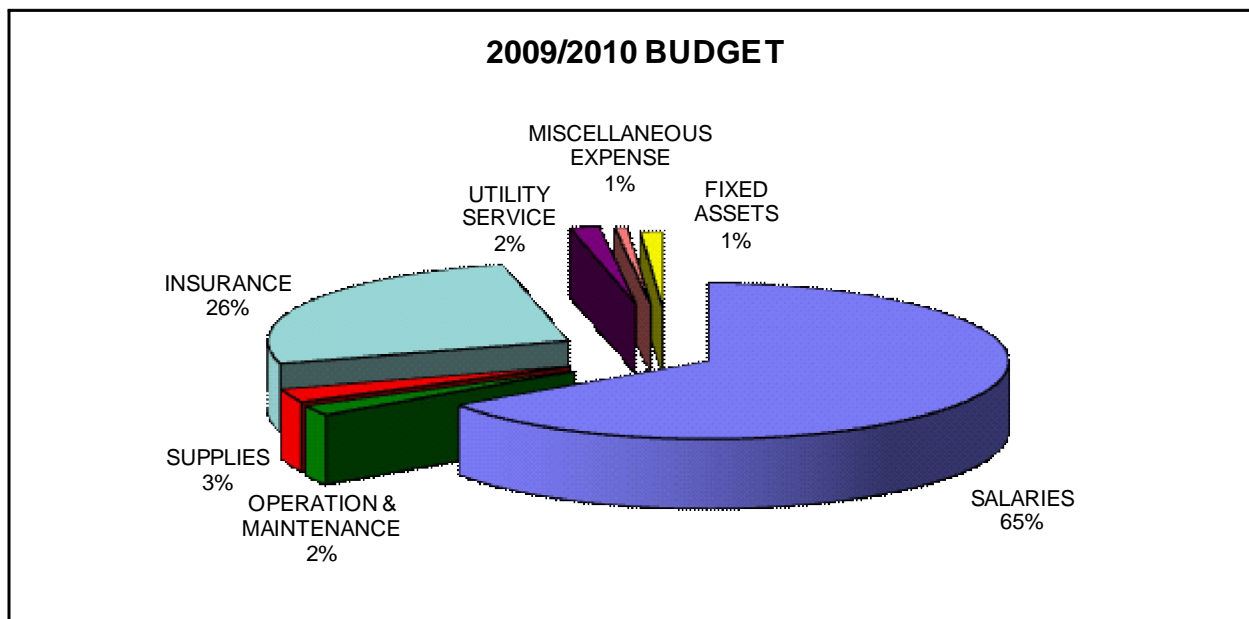
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Budget

The Murfreesboro Fire Department's total budget for the fiscal year 2009/2010 is \$13,756,507. Grant funds of \$79,096 were included in the Miscellaneous Expense in the 2008/2009 budget. Budget figures do not include capital improvement projects.

DESCRIPTION	2007/2008 ACTUAL	2008/2009 ACTUAL	INCREASE/ (DECREASE)	2009/2010
SALARIES	\$8,556,535.95	\$9,121,442.37	\$(122,434.37)	\$8,999,008.00
OPERATION & MAINTENANCE	251,175.42	279,053.27	6,287.73	285,341.00
SUPPLIES	371,572.58	406,599.09	(24,774.09)	381,825.00
INSURANCE	3,481,231.60	3,509,074.49	98,808.51	3,607,883.00
UTILITIES	172,445.94	197,338.07	20,461.93	217,800.00
MISC. EXPENSE	472,140.25	144,006.47	(49,356.47)	94,650.00
FIXED ASSETS	98,355.67	156,587.55	13,412.45	170,000.00
TOTAL BUDGET	\$13,403,457.41	\$13,814,101.31	\$(57,594.31)	\$13,756,507.00



2009 Accomplishments

NEW EQUIPMENT

- One Eagle Air Talon Breathing Air Compressor
- Rapid Intervention Equipment (Grant)
- Urban Search and Rescue Equipment (Grant)
- Fire Extinguisher Training System (Grant)
- One 12' Raft with Storage Chest, Five Paddles, Six Flotation Devices, and Four Helmets for Water Rescue
- Electronic Photo Sensors Installed on Bay Doors at Station 6
- Twelve Portable Radios and Six Rapid Deploy Medical Bags for Disaster Preparedness
- Educational Workstations, Podium and Chairs for Training Room
- Two Hazardous Materials Suits
- Five Sections of 4" Hose
- Three Sections of 3" Hose for Pump Testing
- Three Intake Valves
- Three Portable Suction Units for Medical First Responder
- Replaced Three VCRs with DVRs on Apparatus
- Two One Way Radio Pagers
- One Video Camera

STATION/BUILDING PROJECTS

- Administration - Replaced HVAC Unit; Replaced Carpet in Training Room and Back Offices; Repaired Basement Rails; Replaced Tables, Podium and Chairs in Training Room; Painted Restrooms, Basement Rail and Steps; Tiled Hall
- Headquarters - Repaired Hose Tower Walkway; Painted Hose Tower, Entrance, and Hallway; Replaced Lounge Door
- Station 2 - Painted Offices and Lounge; Replaced Stove
- Station 3 - Replaced Four Doors, Blinds in Lounge, Stove, and Microwave
- Station 4 - Replaced Carpet in Bedroom; Replaced Washing Machine; Painted Engine Room Ceiling
- Station 6 - Replaced Two Bay Doors; Repaired and Tiled Upstairs Restroom Floor; Replaced Dishwasher; Tinted Downstairs Windows
- Station 7 - Replaced Carpet in Bedroom and Weight Room; Painted Bedroom; Replaced Blinds, Mattresses and Dryer
- Station 8 - Painted Interior; Repaired Privacy Fence; Replaced Refrigerator and Washing Machine
- Station 9 - Painted Restroom; Replaced Blinds and Microwave

2009 Accomplishments

FUTURE PROJECTS AND EQUIPMENT

- Completion and Staffing of Fire Station 10
- Roof Replacement Administration and Station 3
- 2010 75' Pierce Aerial with Equipment
- 2011 75' Pierce Aerial With Equipment

PUBLIC RELATIONS EVENTS

- Annual Smoke Detector Program
- National Night Out
- Rutherford County Christmas Parade
- Toys for Tots Campaign
- Hosted Fire Safety Inspector's Conference (243 people attended)
- Hosted the Tennessee Advisory Committee on Arson Conference
- Hosted the Tennessee Public Fire and Life Safety Educators Association Conference
- Leadership Rutherford Emergency Services Event
- Community Cleanup

MISCELLANEOUS

- Created Memorial for Firefighters Line of Duty Deaths from 1939, Wall of Remembrance for Deceased Employees, and Memorabilia Display at Headquarters
- Public Service Announcements on Fire Safety Produced & Aired on Channel 3
- MFD Honor Guard Presented Colors at Thirteen Events
- Firefighter of the Month Award
- Promoted Two Employees to Driver, One Employee to Captain, and One Employee to Shift Commander



FALLEN FIREFIGHTER MEMORIAL, WALL OF REMEMBRANCE, & MEMORABILIA DISPLAY AT HEADQUARTERS

Incident Responses

The Murfreesboro Fire Department uses the Tennessee Fire Incident Reporting System (TFIRS) to report each emergency incident. TFIRS is a member of the National Incident Reporting System (NFIRS). Our incident response statistics are compiled with all other Fire Departments at the state and national level. These statistics can be utilized to focus on current problems and to predict future ones within the fire service.

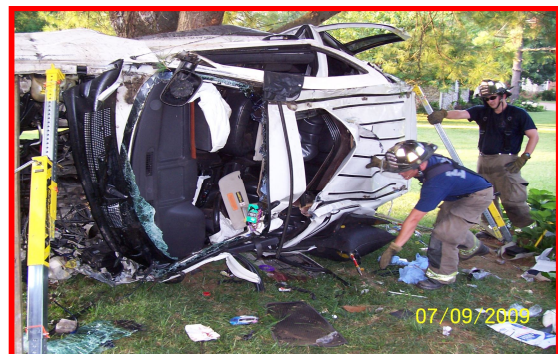
The average travel response time for the first arriving apparatus on an incident was approximately three minutes and thirty-four seconds. The estimated fire loss for the City of Murfreesboro was \$1,538,247, and the estimated property value saved was \$6,445,233. The three most extensive fire losses were a house fire with two vehicle exposure fires on Fox Creek Drive at \$200,980, a house fire on Oxford Drive at \$150,000, and a house fire on Ravenwood Drive at \$96,900.

The Fire Prevention Division investigated thirty-one (31) structure fires. Seven (7) of the thirty-one (31) fires were ruled incendiary. Four arrests were made in 2009. The other incendiary fires are still being investigated. There were two fatal fires in 2009. Ninety percent (89.81%) of structure fire causes were determined by personnel, leaving only ten percent (10.19%) undetermined. Cooking fires were the highest ranked cause at thirty-seven percent (37.04%).

The City of Murfreesboro entered an agreement to provide full fire suppression services for the Veterans Administration Tennessee Valley Healthcare System, Alvin C. York Campus, on June 1, 2001. In accordance with this agreement, the VA pays monthly for fire suppression service. The Murfreesboro Fire Department also performs inspections of fire department connections and conducts hydrant flow tests.



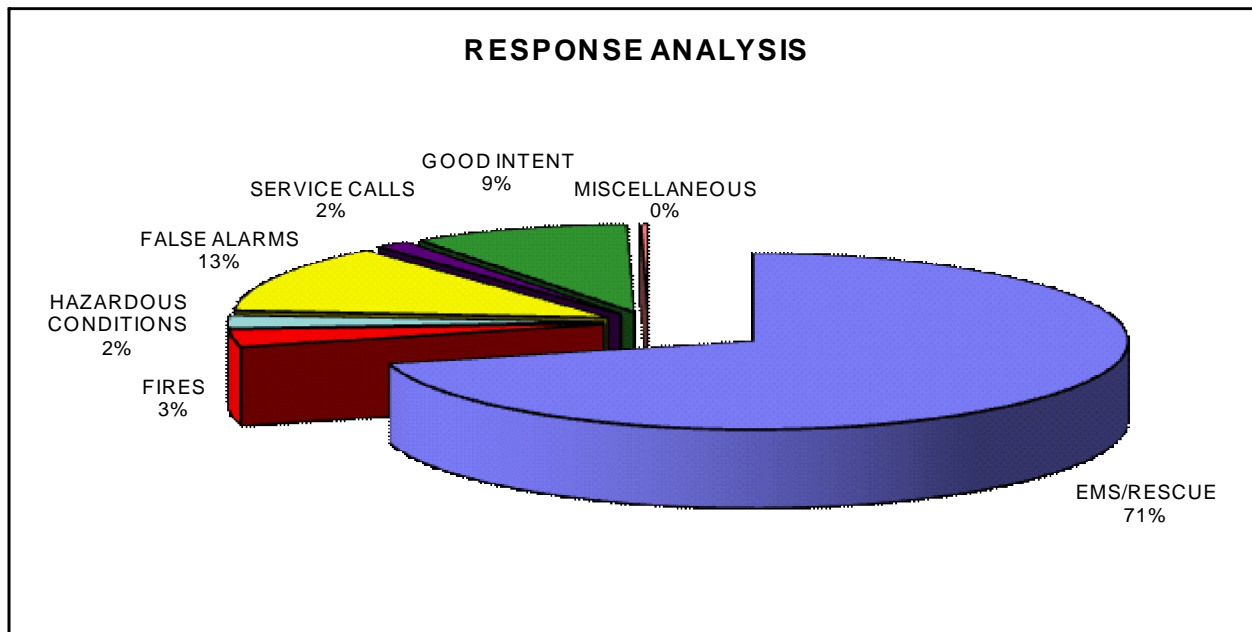
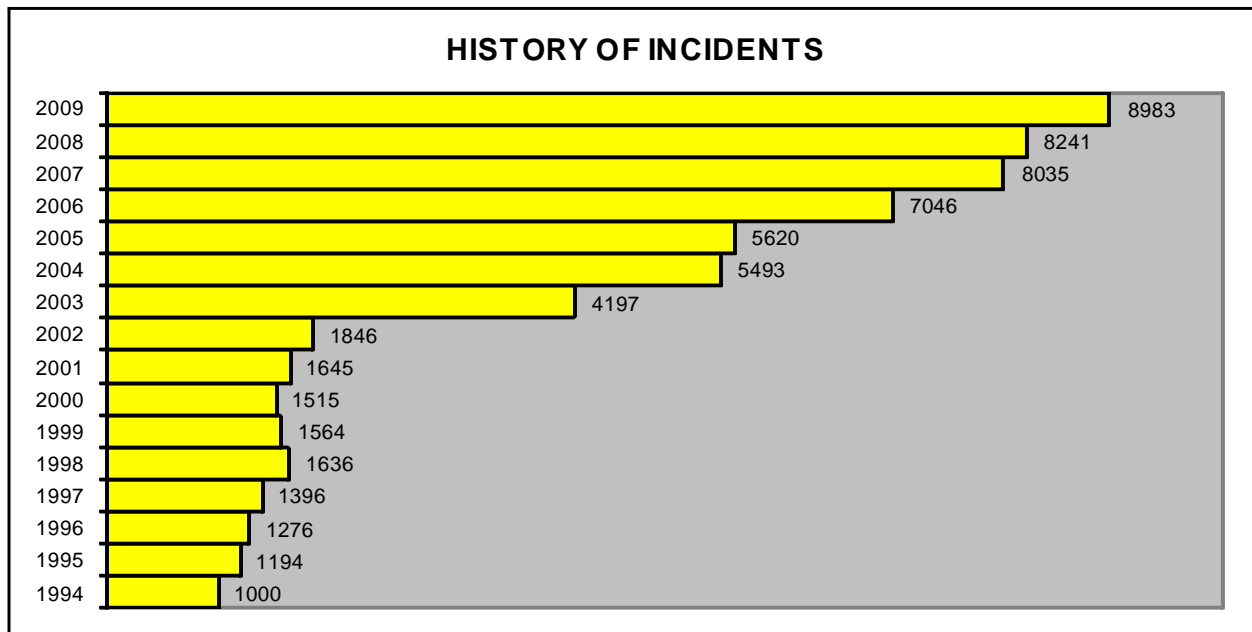
**PERSONNEL FIGHT A
HOUSE FIRE ON
RAVENWOOD DRIVE**



**PERSONNEL STABILIZE A
VEHICLE WITH RESCUE
JACKS & STEP CRIBBING**

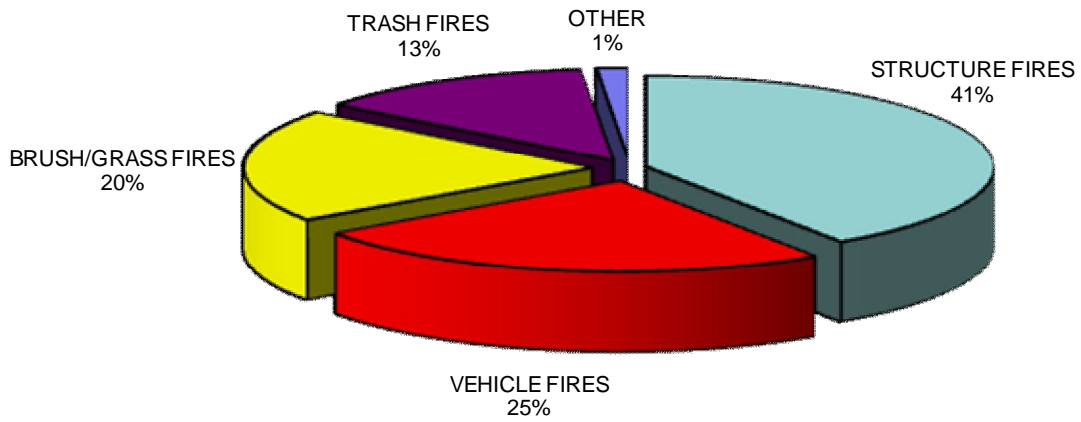
Incident Responses

In 2009, the Murfreesboro Fire Department responded to 8,983 incidents, including 6,363 EMS/Rescue calls. Twenty-five (25) victims were extricated from vehicle accidents. Total calls increased approximately nine percent (9%) from 2008, and 474 percent (474%) since 1999. The following charts illustrate the history of incidents; response analysis; various types of fires; the number of incidents by time of day, day of week, and district; and responses by apparatus; and false alarm analysis.

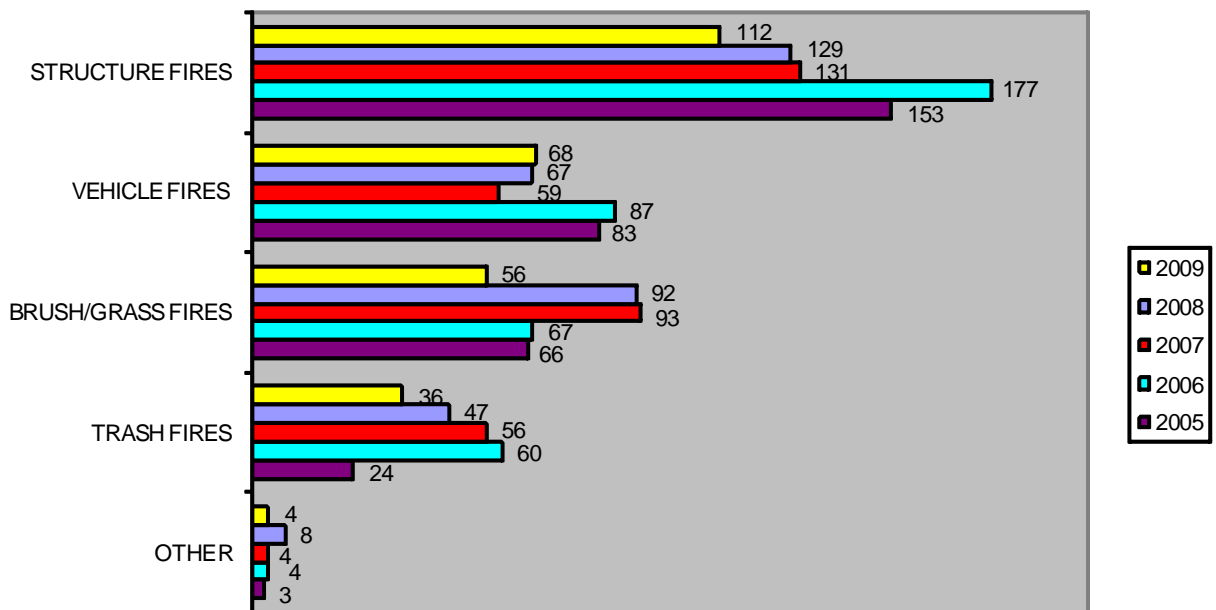


Incident Responses

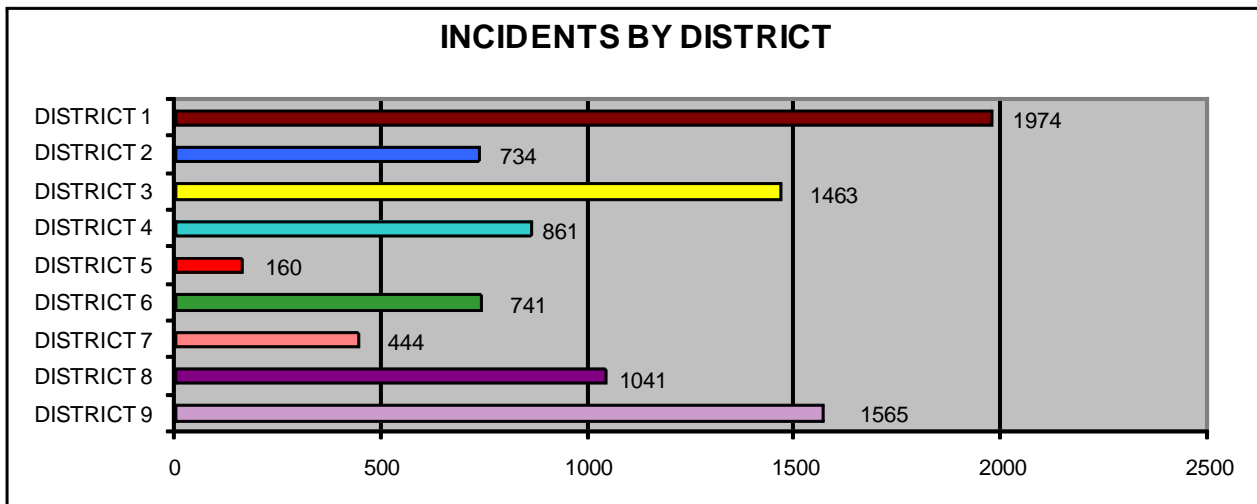
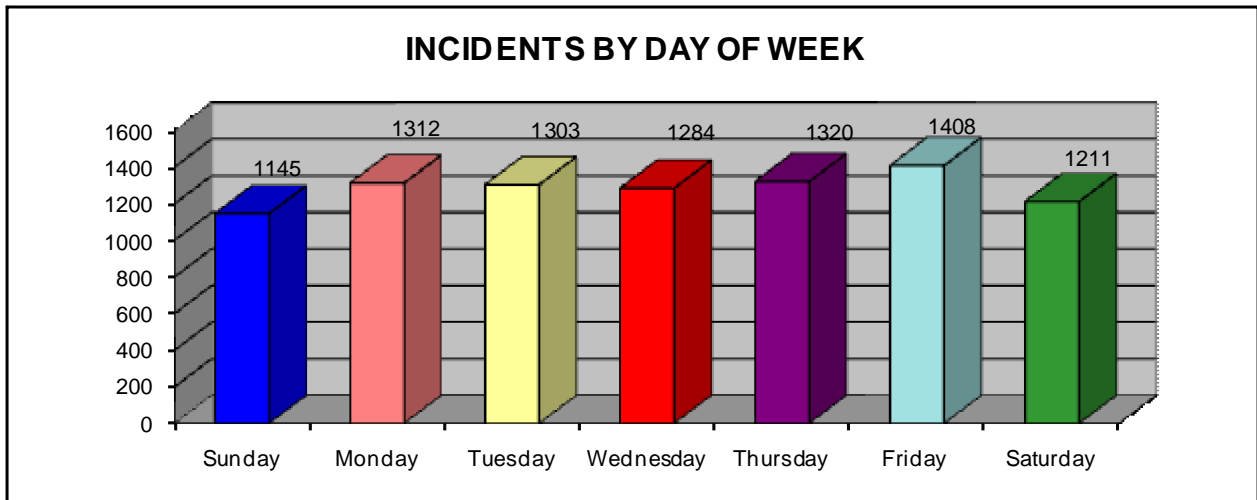
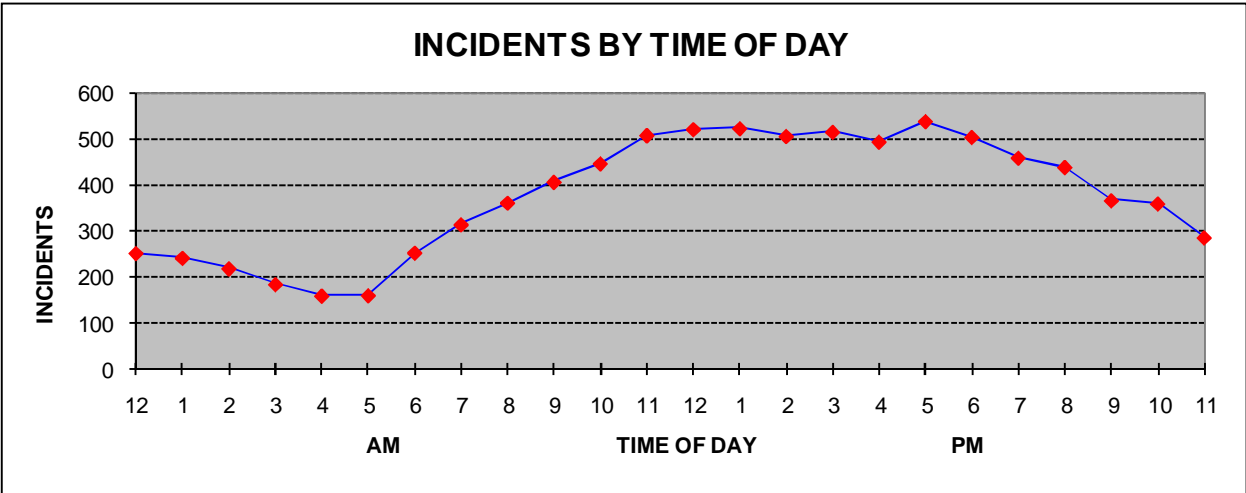
TYPES OF FIRES



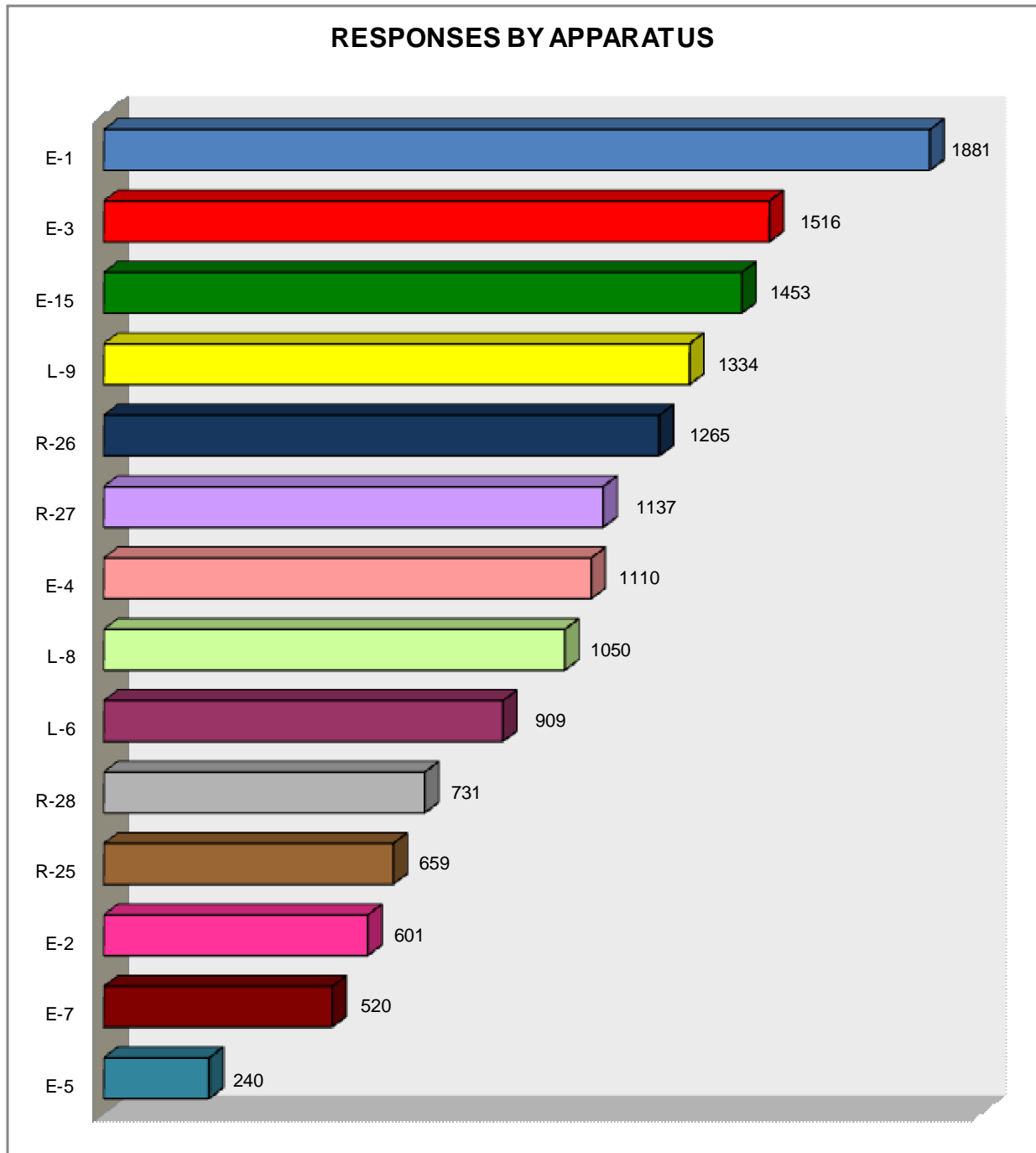
TYPES OF FIRES BY YEAR



Incident Responses



Incident Responses

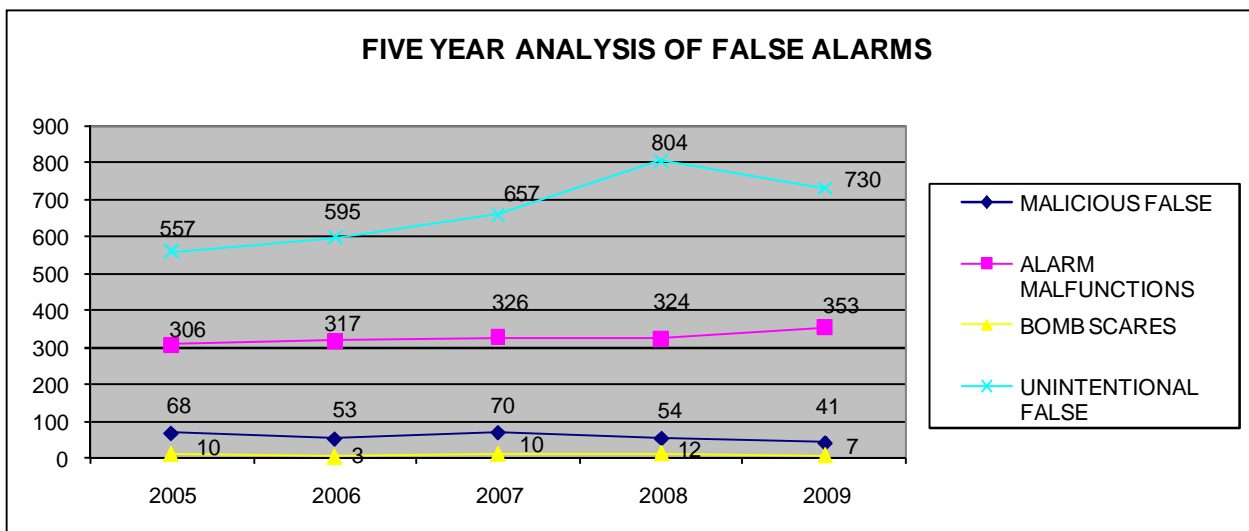
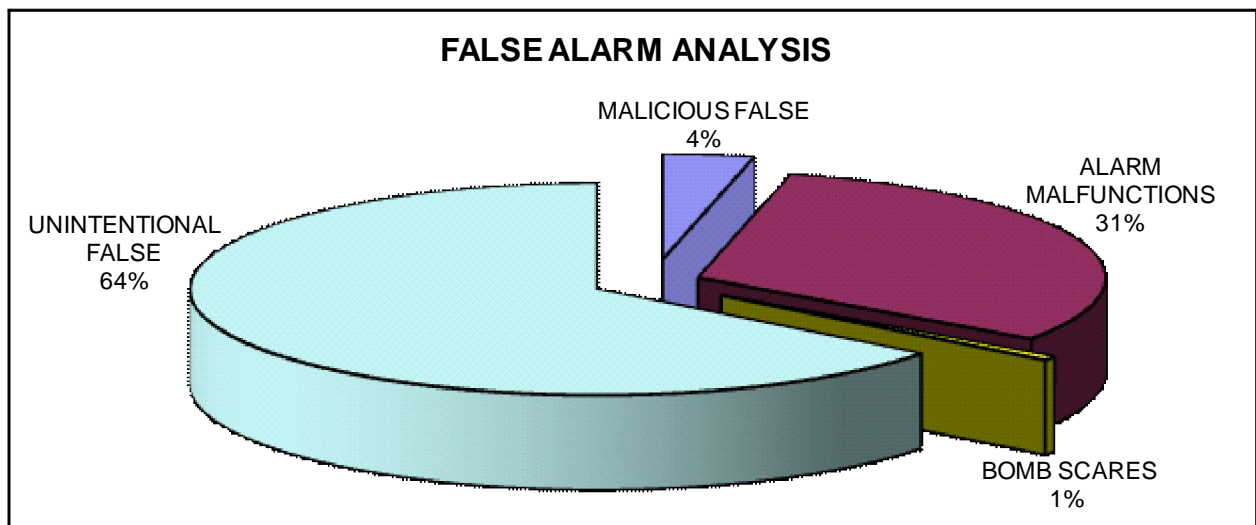


*Multiple apparatus respond to most types of incidents. Typically, only one apparatus responds to a medical call. The above chart depicts the number of incidents each apparatus responded to in 2009; the chart does not include responses of Cars 20 through 35, the brush truck, hazmat truck, or standby engines.

Incident Responses

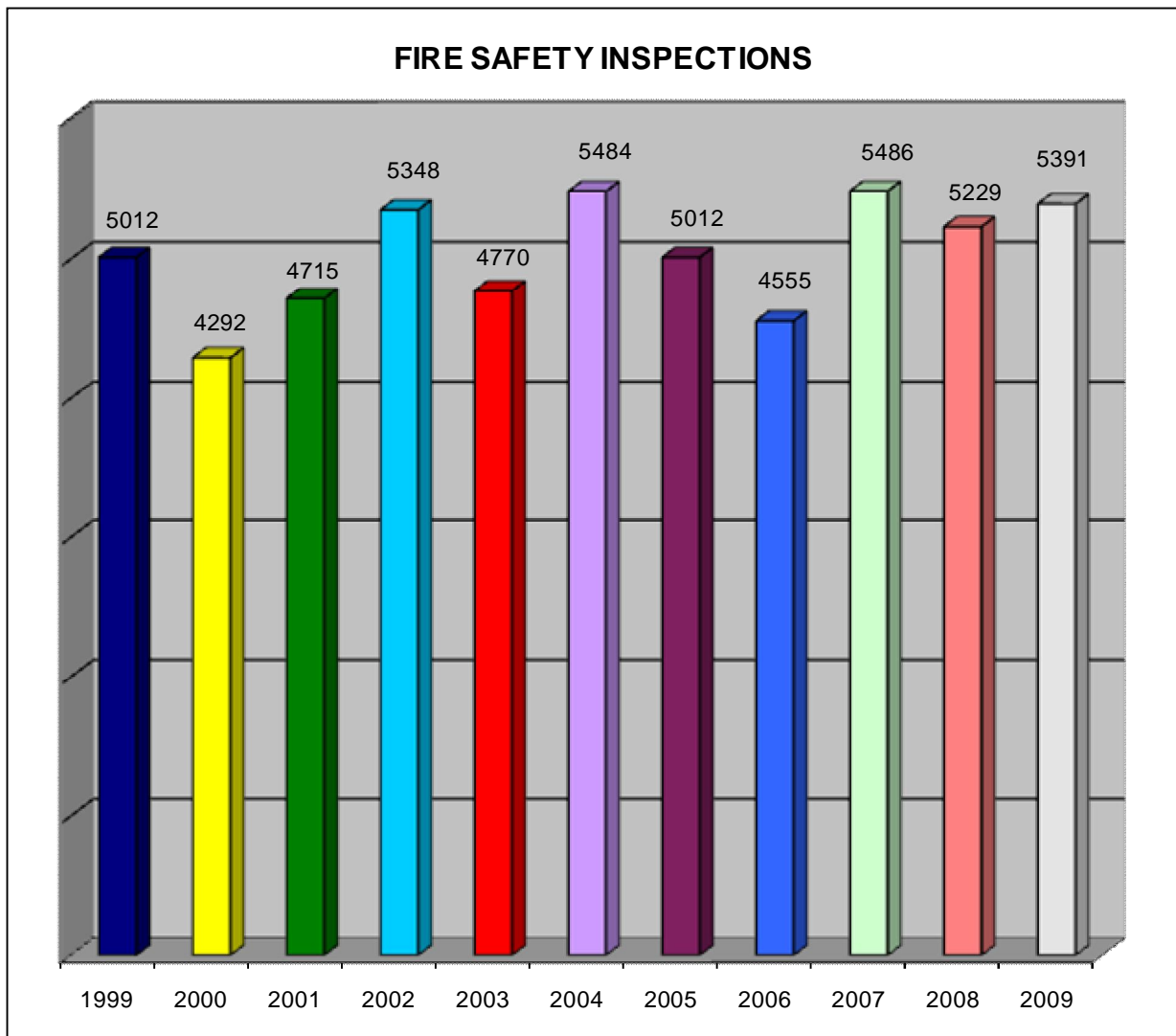
The Murfreesboro City Code dealing with alarm systems was amended in 1999. The purpose of this ordinance is to encourage alarm owners to maintain their alarm systems and to eliminate any unnecessary emergency traffic. This ordinance is also designed to encourage better maintenance and proper installation of alarms. The Murfreesboro Fire Department is making an effort to assist business owners in identifying and eliminating potential problems with their alarm systems.

The Murfreesboro Fire Department received a total of 1,131 false alarms in 2009. False alarms represent thirteen percent (13%) of the total calls for service. The types of false alarms are bomb scares, malicious false, alarm malfunctions, and unintentional false.



Fire Prevention

Fire Prevention is an essential function in reducing fire losses by decreasing the incidence of uncontrolled fires. Inspections help ensure life safety conditions within a structure. During inspections, a Fire Inspector checks for potential fire hazards and advises the owner of corrections needed. These inspections provide an opportunity to educate the public. In 2009, 5,391 fire safety inspections were conducted.



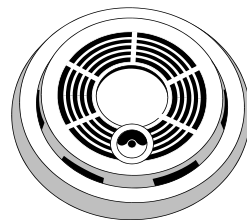
Fire Prevention

The Captain/Shift Inspectors conduct routine fire inspections on existing buildings. Items inspected are exit doors, proper operation of exit doors, proper number of exits, emergency lighting, hazardous materials storage, fire suppression systems, fire hydrants, and fire alarm systems. Assistant Fire Marshals go to construction sites to observe the installation of fire detection equipment, fire suppression systems, notification systems, fire pumps, access to the facility, proper fire hydrant location, and proper fire flows.

Site plans are reviewed biweekly in conjunction with the Planning and Water Departments. The Fire Marshal reviews the plans for proper access to the facility, number of fire hydrants, size of water main, and any hazards existing to hinder fire suppression activities. Comments are noted on the site plan for revision before going to the Planning Commission for approval. Architectural drawings are reviewed weekly with the Plans Examiner of the Building Codes Department to ensure that the building plans meet all code requirements for a safe building.

The Murfreesboro Fire Department monitors open burning for the City of Murfreesboro. Individuals requesting information on open burning are informed of the State and EPA guidelines prior to burning. Approximately 387 requests were made in 2009.

The MFD Fire Prevention Division receives and distributes smoke detectors annually. Since 1990, the MFD Fire Prevention Division has given free smoke detectors to low income families, senior citizens on a fixed income, and burn out victims. In 2000, the MFD started a city-wide smoke detector placement program called Project SAFE "Smoke Alarms for Everyone." Personnel went door to door installing smoke detectors and batteries free of charge. Personnel installed 1,395 detectors and 606 batteries during 2000. In 2009, personnel continued to install smoke detectors through Project SAFE when requested. The MFD plans to revisit the idea of going door to door to further ensure that the citizens of Murfreesboro have working smoke detectors.



There are several ways the Fire Prevention Division learns names of individuals who need smoke detectors. During educational events, such as health fairs, career days, and safety classes, Assistant Fire Marshals ask individuals if they know of anyone who needs a smoke detector. Home nurses and aides also turn in names to our office. If the individual receiving the smoke detector needs assistance installing it, MFD personnel will go to the home to help.

Fire Safety Education

Fire safety education is one of the Murfreesboro Fire Department's primary goals. Fire safety education is the key to saving lives and is taught throughout the year. Our main focus is on home fire safety because over eighty percent (80%) of fire deaths occur at home. The Fire Marshal's Office also educates area business people on fire safety. In 2009, the Murfreesboro Fire Department educated approximately 28,113 children and adults on fire safety.

"Freddie the Fire Truck," acquired in April 2006, is an excellent tool for teaching fire safety. Freddie is a fully animated robot which moves, speaks, winks, blinks, and sounds a siren all by remote control. Freddie maneuvers easily in school classrooms and is just the right size for teaching children. The combination sprinkler/fire safety house, acquired in March 2007 through a federal grant, is another valuable educational tool used to teach children and adults about fire safety and burn prevention. The combination sprinkler/fire safety house is a single story house with a kitchen, sitting area, bedroom and a burn area to show sprinkler operation and effectiveness. Personnel can demonstrate to home and business owners that residential and business sprinkler systems help prevent fires from spreading out of control.

Fire Prevention Week was October 4 through 10, 2009. The national theme was "Stay Fire Smart! Don't Get Burned." During September and October, Murfreesboro Fire Department personnel taught fire safety at each city school, each county school within the city limits, preschools, and daycares using "Freddie the Fire Truck." School children learned about smoke detectors, escaping from windows, and safe places to meet. Students were given ID tags, Frisbees, red plastic fire helmets and/or coloring activity books pertaining to "Freddie" and the lessons they learned.

Station tours are scheduled all during the year. During these tours, children learn about fire safety and prevention. Children get to look closely at fire engines, hear the sirens, watch a safety video, and much more. Children receive red plastic fire helmets and badges, as well as, fire safety pamphlets to carry home. The Murfreesboro Fire Department also participated in several public relations events that provided opportunities to educate individuals on fire safety. Information packets on fire safety were distributed, and personnel were available to answer questions on fire safety.



**PERSONNEL TEACH KIDS
FIRE SAFETY USING
FREDDIE THE FIRE TRUCK**

Firefighter Training

In 2009, 181 Fire Department personnel trained 73,059 hours according to individual training records for a monthly average of approximately thirty-four hours per firefighter. Firefighters train a minimum of twenty (20) hours per month to help maintain the City of Murfreesboro Insurance Services Office (ISO) Class Two Fire Rating. Firefighters receive training from MFD Instructors, the Tennessee Fire Service and Codes Enforcement Academy (TFACA), the Tennessee Emergency Management Agency (TEMA), the National Fire Academy (NFA), the Tennessee Association of Rescue Squads (TARS), and numerous schools, agencies, on-line courses, and workshops. In 2009, personnel attended 46 specialized courses for a total of 12,902 hours.

OSHA regulations mandate facepiece fit tests be administered to each firefighter annually. The fit tests ensure that the facepiece fits properly. The MFD uses the Qualitative Irritant Smoke Protocol to fit test each firefighter's SCBA facepiece. OSHA also requires an annual respiratory evaluation on each firefighter. In 2009, a licensed doctor administered an annual breathing test to each firefighter.

The Murfreesboro Fire Department Training Office oversees the maintenance of 117 self-contained breathing apparatus (SCBA) and 218 cylinders for the department. Regulations require that composite cylinders be hydrostatically pressure tested every five (5) years. All MFD SCBA regulators are tested annually by an outside source to ensure performance. The MFD maintains four (4) breathing air compressor units and thirty-two 6,000 PSI cascade cylinders that supply all SCBA breathing air for the department. The breathing air quality was tested quarterly in the air compressor units by an outside source in 2009. These tests ensure non-toxic air is being inhaled by our firefighters while using their SCBA.

The Murfreesboro Fire Department Training Office keeps records of hazardous chemicals existing at facilities in Murfreesboro. The federal government requires businesses to annually submit a Tier II form to the Fire Department detailing any extremely hazardous materials stored at their facility. The Tier II form contains lifesaving information and is available for all personnel to study. Tier II information is incorporated into our dispatch system.

The Murfreesboro Fire Department Training Office oversees the annual inventory check of all MFD fire stations, apparatus, equipment and fixed assets. In 2009, the MFD had nine (9) fire stations, one (1) administration office building, 23 fire apparatus, and 30 other vehicles. Each fire station and fire apparatus contains an array of relative equipment and when combined, sums up to thousands of fixed assets.

Firefighter Training

The MFD follows the Tennessee Association of Rescue Squads (TARS) Vehicle Extrication teaching curriculum for vehicle extrication training. The vehicle extrication training course consists of three days of training including one day in the classroom and two days at an auto salvage yard. At the salvage yard, the students practice stabilizing vehicles, removing doors, windows, and tops, and pushing dashboards off of victims. A written test is administered to evaluate the students. Personnel also attend the three day TARS Advanced Extrication course. TARS requires vehicle extrication refresher training every two years. In 2009, all MFD firefighters had a TARS training certificate in vehicle extrication.

The MFD uses the United States Department of Transportation and the United States Department of Health and Human Services First Responder: National Standard Curriculum for teaching Medical First Responder. The Medical First Responder course consists of 70 hours of cognitive and practical training. At the end of the training course, students must pass a National Registry First Responder test. Students passing the exam receive a state issued certificate allowing them to perform the duties of a Medical First Responder. A Medical First Responder certificate is valid for two years. MFD firefighters receive sixteen (16) hours of emergency medical refresher training every two (2) years in addition to six (6) hours annually.

In 2009, the MFD had 106 personnel certified in Medical First Responder, sixty-five (65) Emergency Medical Technicians (EMT) and six (6) Paramedics. Three (3) MFD Firefighters/Paramedics and the Fire and Medical Training Coordinator/EMT are certified Medical First Responder Instructors and teach the MFD Medical First Responder classes.



PERSONNEL TRAIN ON STRUCTURAL COLLAPSE RESCUE

Firefighter Training

The MFD has participated in the State of Tennessee's Commission on Firefighting certification program since 1986. Currently, the MFD participates in twelve (12) levels of certification. All tests consist of practical and written parts. In 2009, the MFD administered the practical part of the Fire Apparatus Operator, Instructor I, Fire Officer II, Fire Safety Compliance Officer I and II, and the Public Fire and Life Safety Educator I and II tests. The Firefighting Commission administered the practical for their Firefighter I, Journeyman Firefighter/Firefighter II, Officer I, Instructor II and Safety Officer tests. The Firefighting Commission administers all written certification tests. In 2009, the MFD had ninety-nine percent (98.89%) Firefighter I state certified personnel.

The MFD also participates in the Commission's State Educational Incentive Program. The program requires firefighters to complete a minimum of forty (40) hours of approved training per year. All State Educational Incentive Training is administered within the MFD and is subject to state audit. In 2009, firefighting personnel received \$112,200 for their 2008 State Educational Incentive Training.

The MFD training office maintains records of fire apparatus fire pump annual service tests. In 2009, the service test was performed on fourteen (14) MFD fire apparatus. Most MFD fire apparatus can deliver 1500 gallons of water per minute (GPM). Each pump system is tested according to the National Fire Protection Association (NFPA) Standard #1911 which requires a 20 minute capacity (1500 GPM) test at 150 pounds per square inch (PSI) pump pressure, a 10 minute 70% capacity test at 200 PSI, and a 10 minute 50% capacity at 250 PSI. The MFD performs the fire apparatus fire pump systems tests at the Smyrna Fire Department or Kittrell Volunteer Fire Department water-drafting pits. Eight aerial ladder apparatus are certified annually to ensure safe operation.

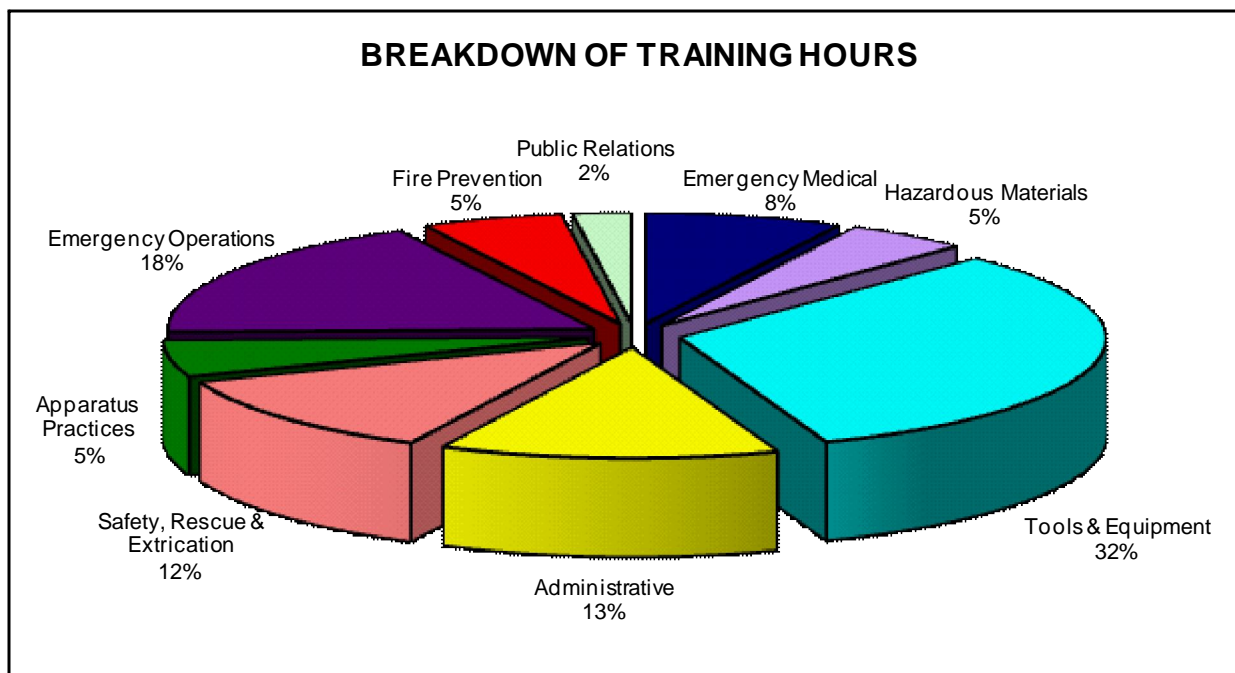
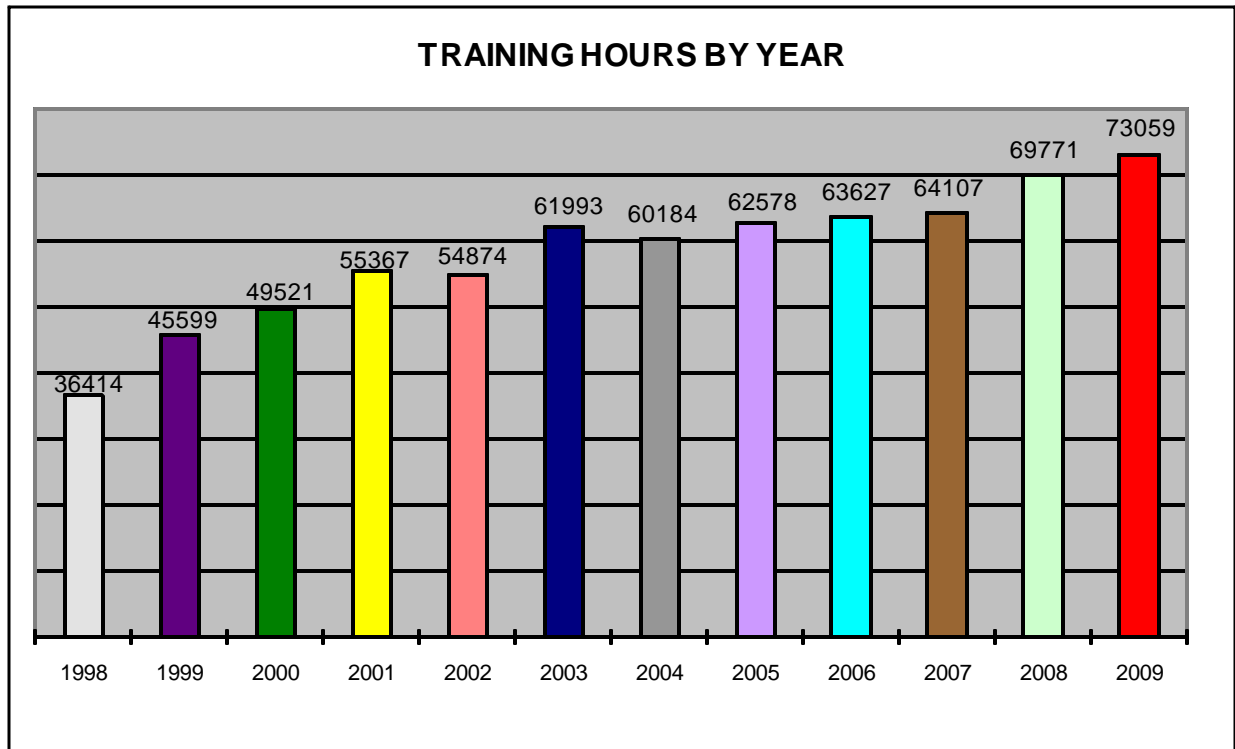
The MFD training office oversees the annual fire hose tests. The MFD fire hose inventory consists of 1", 1.5", 1.75", 2.5", 3", and 4" fire hose that are 50-100 feet in length. The test requires each hose to be filled with pressurized water for five minutes. In 2009, MFD personnel tested 45,925' of fire hose.



**PERSONNEL TRAIN
ON RAPID
INTERVENTION
TEAM (RIT)
OPERATIONS**



Firefighter Training



Firefighter Training

